105 formerly they practiced empollamiento
[846] /5 cont./ ('breeding, hatching")
[771] (couvade); they have a purely exorcistic, animistic system,
[325] and not a sacerdotal or theistic one; they make metal objects;
[505] they travel in canoes..., they grow and spin cotton and make
[248] complicated weavings with this fiber...; they press yucca with
[283] a basketwork press of characteristic design; they make numerous
[286] objects of a typical and fine basketwork."
[285]

Chapter II

The Land Where the Pemón Indians Live

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10. The general area. 11. The main nucleus of the Gran Sabana. 12. Its location. 13. Climate. 14. Area. 15. Orography. 16. Hydrography. 17. The name Gran Sabana. 18. The name Alto /Upper/ Caroní. 19. The name Serranía de Guayana /Guiana Ridge/. 20. The wealth of this region. 21. The beauties of the same. 22. Caroní and Roroima. 23. Means of communication.

131 10. The tribes of the Pemón language live in the most
101 central part of Guiana in the region of Venezuela, which, /6/ orographically we may call Roroima Mountain (N., S., and W. of same) and hydrographically, Caroní River.

I believe it necessary to repeat that the borders of Indians, like those of birds, are not those designated by international treaties; and thus the Pemón Indians go beyond the borders of Venezuela and also extend into the Brazilian campos of the Branco River and into the forests of British Guiana.

11. There are a group of Pemón who live in Kamarata and Urimán (savannas); a few less live in the forests of the Tiriká, the Caroní, and the Paragua; but the main nucleus of this tribe is located on the Gran Sabana, hence we must

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The native women of the Gran Sabana involved in their weaving.

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Fibers and weaving of the native women of the Gran Sabana.

Hunting

/82 cont./

and fishing equipment: bow and arrows, blowgun and quiver, traps and nets, harpoon and hook. Poisons for the same: curare and several kinds of Verbascum. Culinary equipment: grater, manioc strainer, a fine sieve, baking pan, small mats, ollas, large wide-mouthed jars for catching rain, and mixing bowls. Ranchos or temporary dwellings and houses of fixed location: the former rectangular and the latter circular with conical roofs. Items of clothing and adornment: loincloths, feminine guayucos, moriche /palm/ sandals, wrist and ankle rings, garters, foliage coverings /pampanillas/, halos, necklaces and earrings; hammocks, bags, and straps for carrying children. Their household items: small benches, pothooks, camazas /large gourd dishes/, awls, guayares, and an infinity of baskets. Their instruments of navigation: paddle and pole, balsas and canoes made from tree trunks or with their bark /concha/ only. Their textiles: with the spindle, fibers twisted upon the thigh, other braided fibers and small weavings done on rudimentary looms. Their musical instruments: timbrels, whistles /pipes/, flutes, war trumpets /botutos/, and drums. Their agricultural cultivations: yucca, plantains, maize, cane, ají, auyama /gourd plant/, cotton, tobacco, and various sorts of tubers. The preparation of foodstuffs: boiled and roasted food, cassava and mafioco /maize flour/ ground in a mortar, guarapos /sugar-cane juice/ and purées, fermented and nonfermented. Etc., etc.

179. It should be made clear that these Indians for many generations have, through other neighboring intermediary tribes, been obtaining some instruments of our European civilization: knives, machetes, chícoras, axes, fishhooks, firearms, files, mirrors, glass beads, cloth for loincloths /guayucos/. But they still remember a time when they used to make their loincloths and straps for carrying children from the bark of special trees; when they made their fishhooks with thorns from plants or barbs from fish; when they made their arrows with tips of bone, wood, or a special cane; when they used dextrales (stone

*192 386 824 174 [249]

This dye is made from the pulp around the seeds in the fleshy fruits of Genipa americana, planted near houses for that purpose. The Arawak name is karuto (and variants), whence comes the Venezuelan Spanish "caruto." The resemblance of the Kamarakoto word and its difference from those in other Carib dialects suggest that it may have been borrowed from some Arawak tribe, perhaps from the Guinaus, with whom the Kamarakotos have probably had some contact and who call this plant galu:tu (Koch-Grünberg: = karu:tu in Kamarakoto phonetics).

*192 *197 386 181. Red — rana. Taurepán rana. Makuchi (Williams) rana. A less-used wild variety of Genipa americana.

[824] 182. anonda. Taurepán (Koch-Grünberg) anonte, anunte. Makuchi (Williams) nu-ku, a-nun-tu. Galibi (Adam) anoto. Cariniaco (Adam) anoto. This is the famous and widely used dye made from the seeds of the shrub Bixa orellana. It is cultivated for this purpose all over Venezuela and called "onoto," from the Carib word. In England it is called "arnatto" — also an attempt at the Carib word. It is curious that in British Guiana ruku, which generally means the very different Genipa dye, is applied to this dye.

[824] 183. karaberõ. Taurepán (Koch-Grünberg) kurauili (perhaps kurawiri). Makuchi (Appun)[52] karaweru. This is a purplish-red dye made from leaves of the liana Bignonia chica.

[439] 184. kurawõri. This dye is not made by the Kamarakotos but is obtained from the Maiongones (Maquiritares) by trading and I did not learn how they make it. The Kamarakotos distinguish this word from their karaberõ, but it seems probable that it is merely a dialect (presumably Maquiritare) form of the same Carib word.

[302] 185. White — tauwa. Makuchi (Williams) ta-wa. This is a fine, white clay used as body paint.

*192 f. Thread, fiber, etc.

● 283 186. String, line (as for fishing) — yeba. See No. 103.

187. Cotton thread, spun cotton in general (including store- or trade-thread) asei.a.

*[192] 188. Fine native cotton thread — asei.a-inimu'. Makuchi (Williams) e-ni-mo, "ball of finely spun cotton."

52 [see footnote on p. 312, category 116 – Analyst]

*192 *197 824 285

189. "Split reeds for basketry (the commonest sort, in local Spanish "tirita") — manare. Taurepán (Koch-Grünberg) mana:le (= mana:re). Makuchi (Williams) ma-na-ri, "casava sifter" (called pangaiˀ in Kamarakoto and pangaˀ in Taurepán); ma-na "reed used for basket work." In Makuchi (and many other Carib dialects) the form with -ri or -re designates a particular one of the many sorts of basketry made from these reeds and the word has been taken over into Venezuelan Spanish, "manare," with this meaning. In Kamarakoto and Taurepán, however, the word in this form means the reed itself, never one of the things made from it, which all have quite different names. This reed is a (or some) species of Ischnosiphon.

190. "Split vine for basketry (less often used, in local Spanish "camuare") — wadapi. Makuchi (Williams) wa-tha-be (th as in English "thin"). "liana....used for winding round rolls of tobacco." This is actually a palm, Desmoncus sp.

*192 *197 824 ● 283 285

191. "A strong fiber (in local Spanish "curagua") — kurawaiˀ. Makuchi (Williams) ka-rau-ya. These fibers are obtained from the leaves of species of Bromelia and are widely used in Venezuela where the Spanish name is derived from the Carib word.

192. Round, tough vine (in local Spanish, "bejuco de alambrito," i.e. "wire-vine") — tsimoˀ. Compare tsimuiˀ, No. 99, a basket made of this fiber.

193. Palm-fiber (from the moriche palm) — kutsaˀ -epichaˀ. (Palm leaves, as opposed to fiber, are also used to make baskets but are called simply "moriche leaves," etc.; see "Plants.")

*192 *197 352

g. Furniture, utensils, etc.

194. "Hammock — kami (but ukaimi, "my hammock"). Taurepán (Koch-Grünberg) kami (but u-ka:limi, "my hammock").

195. Hanger for hammock ("colgadero") — ɛtseba.

196. "Bench — aponoiˀ. Taurepán, apono, ponoˀ.[53] Makuchi (Williams) a-po-no. Krishana (Adam) (i-)apon. Galibi (Adam) abo.

197. Hanging cradle — paka:ri.

*192 283 412

198. Spindle — kateuwai-yeupu (literally "cotton-bone").

199. Nail, hooked on end for crocheting — peoi-gatsaˀ. gatsaˀ probably means "bent" or "twisted" and peoi is "nail." In most Carib dialects "nail" is called by some variant or reduced form of putuputuri which also occurs in Arawak (See de Goeje No. 67), but note Purukotó (de Goeje) puia.

[53] [see footnote on p 312, category 116 - Analyst]

411 The standard weapon is still the bow and arrow and practically every [887] male over the age of two has a bow of some sort. Very small boys improvise bows out of twigs, much as white children do, and play "Indian." Older boys [824] have bows almost like the men's but smaller. The standard bow (see Fig. 15) is usually made of araguaney wood (urapadɛ). Tecoma sp., a heavy (heavier than water), fine-grained, dark or reddish brown wood which is carefully smoothed and polished and is beautiful in finish and texture. Its length, often nearly two meters, is greater than the height of the user; one in our collection measures 190 cm., more than 10 cm. longer than the height of the tallest man seen. Its greatest diameter, in the middle, is usually less than 2 centimeters, tapering nearly to a point at both ends. The anteroposterior diameter is greater than the transverse. The front side is grooved for its full length. Fifteen to 20 cm. from each end is a spiral wrapping and between these one or two cords are stretched in the groove, putatively to add to the strength of the bow and help resist the pull. The bowstring is continuous with one of the spiral wrappings, whence it runs up the groove to the nearest end where it is permanently looped and then down the back of the bow to the other end where it is fastened by a loop that is taken off the wood when the bow is not in use. When unstrung the bow is perfectly straight and the string is only enough shorter than the bow to be taut when strung. Smaller bows, for boys or for use against small game, often lack the front strings and special wrappings and have the bowstring considerably shorter so that the bow is more definitely curved when strung.

Although the Kamarakoto bows are very handsome and carefully made, they will not withstand a heavy pull[111] and their accurate and hard-hitting [224] range is only a few meters. The Indian habit, also encouraged by the scarcity and high cost of powder and shot, is not to fire until he is on top of the game and virtually cannot miss.

A full sized arrow may be nearly as long as the bow, 130-190 cm. Arrows of many different types, from mere sharpened sticks up, are used. The most characteristic are the tarau, panachika, supalari, and waibakasi. Of these the tarau (Fig. 16B) is the simplest, as its name (= "simple") implies. It is used for shooting birds and is a reed shaft with a long wooden point. This point, not particularly sharp, is somewhat flattened and has several barbs asymmetrically whittled on its two sides. It is set into the shaft and the joint bound with [263 237] kurawai thread fastened with beeswax. The string end or nock commonly lacks the plug usual on other arrows and may be formed simply by compressing and binding the reed. This arrow is usually feathered, while the others usually are not. A typical specimen is 130 cm. in length (shorter than most types of arrows) of which the free point measures 14 cm. The center of gravity is 74 1/2 cm. from the butt.

[824] The panachika (Fig. 16D), used for hunting mammals and all sorts of small game, is more complex with a barbed steel point, wooden foreshaft (of

111 [see footnote on p. 320, category 116 - Analysis]

227 that they have always had steel hooks. The Kamarakotos use an ingenious device to prevent the fish from cutting the line, analogous to the wire or gut [314] leaders of more civilized fishing. The shaft of the hook is lashed to a stick of wood several centimeters long and the whole coated with balata. I have seen such "leaders" deeply scored by the teeth of fish and obviously they save many [283] cut lines. The line is cotton string and is simply tied to the end of a pole, without any arrangement for reeling or other complications.

Hand nets are of two kinds. The larger, iruʾ, is used only for scooping [283] out fish already dead or stunned — it is purely a landing net. It is made of heavy double-twisted kurawai fiber knotted in a large square mesh (the weave is described under "Textiles") and as mounted, is about 50 cm. in depth and 20-30 cm. in diameter at the mouth. The throat is smaller and the lower end expands again to a square termination (see Fig. 18 B), an arrangement that tends to keep moribund fish from leaping out. This is mounted on a liana loop, the two ends of which, projecting together, form the handle.[118]

The other net, pendə, is used for live fishing and is much smaller than the iruʾ (see Fig. 18 A). It is only about 15 cm. deep when closed and the open mouth is 10-15 cm. in diameter. It is also of double-twisted kurawai, but the strands are finer and the weave more open than in the iruʾ (see "Textiles"). It is mounted on a small, very smooth liana frame on which it slides freely. The frame has a short handle and is tied to the end of a long pole for use. When a fish is scooped in, the net slides to the end of the frame and bunches there so that the mouth closes.

226 The fish trap, muroiʾ, (visible in Fig. 9) is made of small cylindrical withes or wicker, (peeled sections of a small, tough vine, tsimoʾ), tied together into a rectangular mesh (see "Textiles"). The body of the trap is roughly cylindrical with one end terminating in a rigid ring from which flexible withes project freely back into the cylinder, forming a core which will yield and open when a fish enters but which springs back and prevents exit. The other end of the cylinder is left open in weaving and is tied shut when the trap is in use, opened again to remove the fish. The trap is fastened in an opening in a partial dam across a stream and fish are driven into it. Only small fish are so caught.

The favorite and most productive method of fishing is by poison, "bar- [824] basco" in Venezuelan Spanish (see Figs. 19-22). There are several different poisons but the most used, the only one that we saw employed, is inəʾ.[119] This is a vine of which both stem and root are poisonous, the latter more so. Large quantities of this are gathered, cut into sections about 50 cm. in length, [476] bruised by light beating, and tied into bundles. On the chosen day all the Indians of the vicinity gather at the stream to be poisoned and the men take the poison to the most upstream point to be fished. Someone goes a few meters above this point and muddies the water, as a signal and an aid in telling how

118, 119 [see footnotes on pp. 320-21, category 116 - Analyst]

[Text continues on p. 136]

291 (Fig. 33A). The loincloth is a long band of red fabric, now always trade goods but formerly of cotton homespun, passed between the legs, looped over the belt, and usually, but not always, wrapped around the waist, in such a way as to form a tight pouch over penis and testicles with one end hanging free in front of this and the other similarly hanging down behind.

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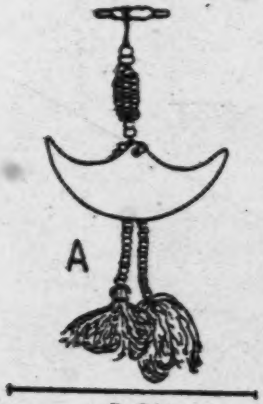

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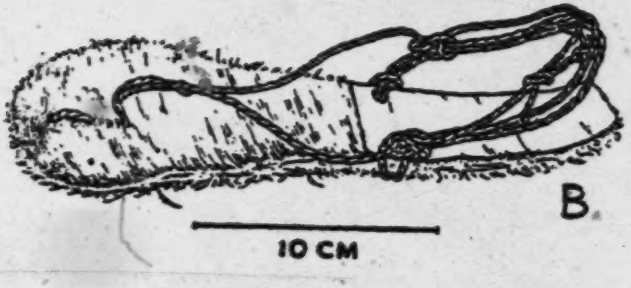

Fig. 32 — Kamarakoto Earring and Sandal.
A, earring, a silver crescent pendant with red, white, and blue beads and red cotton tassels. B, typical sandal of moriche palm leaf base with moriche fiber cords.

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824

171 The native sandal (Fig. 32 B), is almost identical in pattern with one of the crudest types used by the lower classes in northern Venezuela, but it seems certain that the latter is a survival of a widespread pre-Columbian pattern and that this is native and not introduced among the Kamarakotos and allied tribes.[132]

132 [see footnote on p. 322, category 116 - Analyst]

294 The nearly flat sole is cut from the thick, fibrous, and nearly inflexible leaf
[829] base of a moriche palm. On the upper (foot) side, the anterior end is peeled,
[28] while the heel part is left with the smooth surface of the cortex. Cords of moriche fiber are used, several cords running together from holes on each side at the front of the heel part (at the instep) and these run behind and above the heel when the sandal is worn. A double cord is attached through three holes (in longitudinal series) at the front part of the sandal so as to run between the first (big) and second toes, then separating and tying to the heel cords above
291 their attachments on each side. Essentially similar sandals are worn by almost
171 all the sabana Indians of this whole area, even into northern Brazil. They are
182 another indication, if any is needed, that the Kamarakotos are decidedly sabana Indians, for sandals are rarely or never used by the forest tribes and are, for in-
[481] stance, unknown in the mainly forested Amazon valley, proper. Even the sabana Indians, including the Kamarakotos, seldom wear them, however, doing so only on relatively long marches in the dry season and taking them off around
[172] their homes or on soft or slippery terrane. These sandals are called purai while
[192] the recently introduced Venezuelan sandals are called by their Spanish name, "alpargata."

291 The primitive female costume consists only of an apron just large enough to cover the pubic region and with attached strings by which it is tied around
[286] the waist. This apron, the mosa or motsa, is now always a woven fabric with
[171] beads. Like the dress it is an adaptation of a foreign material to native use, but it is a far older one and merely uses the material in a purely native pattern. These aprons are very attractive and are made in a great variety of patterns —
[53] indeed I have never seen two exactly alike. The favorite colors are white and dark blue and usually the main part of the apron will be solidly one of these, with geometrical borders of the other above and below. There may rarely be an allover pattern or a median band, and colors other than blue or white are sometimes used, but in all that I have seen blue or white predominates,[133] Some of the women always wear the mosa, even though a dress be worn over it. The dress has thus supplemented and not supplanted the older costume and this is an interesting and quite literal example of cultural stratification.

174 It is commonly believed that all the Carib tribes, which would include
291 the Kamarakotos, went without any clothing, even loincloths and aprons, in pre-
[177] Columbian days and that the practice of covering the pubic region arose under European influence. Koch-Grünberg, for instance, states this very positively as regards the loincloth and notes as a decisive argument that even the (Taurepán, not Arekuna in general) name kamisa, is foreign. De Goeje is equally positive as regards the Dutch and French Guiana Caribs and cites Barrere as saying in 1743 that they were completely naked. Roth quotes numerous authorities to this effect regarding British Guiana Indians and apparently inclines to agree with the consensus although he does not give a specific statement of his own

133 [see footnote on p. 322, category 116 - Analyst]

Materials.

28
128 Textiles in general and those of American (especially North American) Indians in particular have been elaborately studied and classified. Their classification and treatment depend in the first place on the materials used, in the second place on the techniques of manufacture, and in the third place on the forms and uses of the finished objects. All three of these phases are treated in the present section.

Nearly all the textile materials known to man fall into the following classification, in which the types used by Kamarakotos are starred:

283 * I. Flexible fibers twisted or spun for use (mainly cloth materials).
- A. Animal.
  - a. The various animal wools. (Kamarakotos have none.)
  - b. The various silks. (Kamarakotos use none.)
- *B. Vegetable.
  - *a. Woolly — cotton and analogous fibers, spun for use. (Kamarakotos use cotton; have kapok but do not spin it.)
  - *b. Fibrous, bast and analogous fibers twisted for use. (Kamarakotos use two of these, specified below.)
- C. Synthetic — necessary to complete the classification but obviously with no bearing on primitive races.

285 * II. Flexible (or relatively inflexible but elongate) materials used without twisting (mainly basketry materials).
- A. Animal — sinews, strips of hide, etc. (relatively unimportant and not used by Kamarakotos). Quills and a few other still less important materials might also be placed here.
- *B. Vegetable.
  - *a. Round.
    - 1. Bundles, of grass or any straight, flexible material. (Not used by Kamarakotos.)
    - *2. Stems, of reeds, vines, bamboos, willows, etc. (Kamarakotos make limited use of a vine.)
  - *b. Flat.
    - *1. Leaves, or segments of them, rushes, palms, etc. (Kamarakotos use palm leaves.)
    - *2. Split materials, split reeds, bark, and wood. (Kamarakotos make extensive use of split reeds, but do not use bark or wood, strictly speaking.)

286 "III. Rigid materials that unite a fabric of flexible strands passed through holes in these.

Beads and analogous pierced pieces of all sorts of materials, animal, vegetable, and mineral. (Kamarakotos use glass beads and pierced seeds.) These are not often classed as textile materials, but there are many true textiles that cannot be made without them, in which they are an integral part of the weave which would unravel or collapse without them.

248 Of the twisted or spun fibers, cotton, the only one that they spin, properly speaking, is the most important to the Kamarakotos. It is extensively planted, both in the farm patches (conucos) and in small thickets around the houses. The latter may have sprung up originally from discarded seeds, but they are encouraged and used extensively and cotton will grow fairly well on the relatively barren sabanas. It ripens in the latter part of the dry season and when the pods split they are gathered, dried and bleached in the sun in a basketwork tray, and ginned and carded by hand. No comb or other device for carding is employed to supplement the fingers, but the cotton is slowly teased and worked out into a long roll, the thickness depending on the weight of the desired thread.

283 Of the fibers that are twisted, rather than spun, only two are important
824 or appear to be truly native and regularly employed, one from a Bromelia and the other from the moriche palm, Mauritia. The leaves of the Bromelia, kurawaí of the Kamarakotos, "curagua" in colloquial Venezuelan (a cognate word), are pulled through a loop to break them and expose the fibers which are then carefully drawn by hand, washed, and dried and bleached in a tray in the sun. The coarser but strong and lustrous Mauritia fibers are made from young leaves, split into segments and then broken by doubling and pulling in the fingers until the fiber bundles can be drawn. These are soaked well in water, cleaned and sometimes further split, and then dried and bleached.

[171] The fibers of the Agave and Fourcroya type, "coculiza," "cocuy," "maguey," etc., so widely used in northern Venezuela, are not used by the Kamarakotos although one of the "modernists" suggests their introduction. Since they serve no other purpose than do the curagua and moriche fibers and are decidedly inferior to these, it is to be hoped that his plans will not work out.

285 Among untwisted textile materials, for baskets, mats, fish traps, etc.,
824 three are in general use: palm leaves, a small flexible vine, and the split cortex of a reed. Almost any palm leaves may be used occasionally, but the two regularly employed are moriche (Mauritia) leaves, kwai-yarę, and seje (Oenocarpus) leaves, kunwada-yarę. The palmate moriche leaves require splitting while the pinnate seje leaves do not, but in both cases the strips are not detached from the rib, which becomes part of the finished object.

285 824 Any flexible vine may be used for cord, but the only one commonly used for textile work (traps and a few baskets) is tsimo?, "bejuco de alambrito" in colloquial Venezuelan (but this term is applied to various small vines and I do not know the botanical name of this particular one).[140] This vine is peeled, occasionally split and trimmed, and gives a basket-material of Class II-B-a-2 of the classification given above.

By far the commonest and most important of basket materials, however, is a split reed, probably Ischnosiphon sp., called "tirita" or "tiriti," in Venezuelan Spanish, and manare in Kamarakoto.[141] These reeds are split longitudinally into segments (usually eight in number) and the pith is cleaned from each. The green epidermis is usually removed, but may be left. The outer (convex) surface is sometimes painted black with pot soot, for weaving patterns, but usually they are left of the natural color which is pale yellow, turning pale brown, for the peeled, and pale green, turning a darker brown, for the unpeeled segments.

The only other basket material of any importance is a vine (actually a palm with the habit of a vine) called wadapi, a species of Desmoncus, "camuare" in local Spanish, closely allied to the well-known "albarico" of northern Venezuela. Suitably split and flexed, this gives a flat wicker of rich, dark brown color. I saw no baskets made entirely of this among the Kamarakotos, but they commonly use it for the color contrast as an occasional strand in a basket otherwise made of manare.

Spinning and Twisting.

283 114 128 Throughout the great South American textile area, variations in technique are numerous and characteristic and have been made the subject of an important monograph by Frödin and Nordenskiöld (1918). The present section will briefly describe the Kamarakoto variations of these processes and will fit them into the distributional pattern that Frödin and Nordenskiöld have established.

283 171 For spinning cotton, the Kamarakotos use a true spindle (Fig. 35), such as occurs all over South America except in the farthest south and a few isolated areas (e.g. on the upper Rio Negro and Yapura). Within a more limited area, Im Thurn and others have shown that the Caribs almost all use spindles and spin cotton while the Arawaks often do not, using twisted fibers instead, except under apparent Carib influence.

Frödin and Nordenskiöld divide South American spindles into the Bororó-type, in the Andes and the far southern or southwestern Amazon Basin, and the Bakairí-type, practically everywhere on the continent. The Kamarakoto spindle belongs, of course, to the latter type, with its lower end thickened and only roughly rounded, the whorl wedged onto this and adapted for vertical spinning, and the thread wound on the working end above the whorl.

140, 141 [See footnotes on p. 323, category 116 - Analyst]

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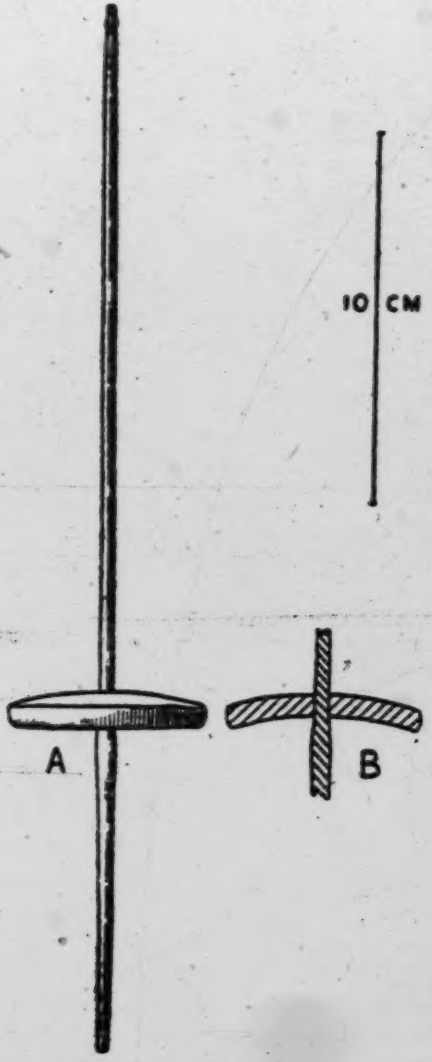

Fig. 35 — Kamarakoto Spindle.
A, side view of spindle. B, partial cross section showing fitting of whorl on spindle.

824 The whorl is discoidal, undecorated, and usually is a thick but light piece of calabash with the convex side up. It is considerably nearer the lower than

●283 the upper end. The upper, working, end does not have a hook but a head, a slight double swelling formed by notching. This is a common type of spindle among the coast Caribs and the Motilones, and it is remarkably like many Bolivian spindles, but it is curiously unlike the Taurepán spindle which, according to Koch-Grünberg, fits the whorl, which is usually decorated, near the middle and has a hook. It is still less like the Maquiritare type, which is much larger and is used horizontally and not dropped.

In use, the unspun cotton is held in the left hand, the spindle is started rotating by rolling the lower shaft (below the whorl) on the right thigh with the right hand, and it is then dropped, still whirling (Fig. 36). Tension is kept up by the left hand and by the weight of the spindle when dropped. This is the procedure also of the Taurepánes, despite their different spindle, and of most of the other tribes of this region but not, as has been noted, of the Maquiritares.

In all the Kamarakoto spun cotton that I have examined the spinning is to the left, i.e., when the thread is held horizontally the fibers (in the basic single strand) run from left-up to right-down. This is true also of the Taurepánes and Maquiritares and probably of Caribs generally, as far as the point has been determined, but the non-Carib Bakaïrís, who have given their name to this general type of spindle, spin to the right and so do many other tribes. Left-spinning is not exclusive to the Caribs but it is certainly one of their striking characteristics.

The single strand thread resulting from one spinning is, if well-made, very fine and rather weak and it is almost never used in this form. Usually two strands are attached and are twisted together on another spindle, making a two-ply twine. This spinning is always in the opposite direction, i.e. to the right, which keeps the first twist tight. Two two-ply strands are often twisted again, this time to the left, to make a composite four-ply twine, a double two-ply. A straight three-, four-, five-, and up to eight- (or even more) ply twine may also be made by one twist, to the right, from the basic strands and various combinations occur. A 21-ply heavy cord made from three 7-ply strands is not uncommon, and I have seen a piece of 93-ply cord, as strong as rope, made of three twists of thirt-one strands each, but I am not certain that this was Kamarakoto although so informed by the Indians. This heaviest twining is not done on a spindle but is rolled on the thigh with the palm of the hand.

All these native twines are remarkably fine and uniform and sometimes can hardly be distinguished from a machine-made cotton twine.

Moriche and curagua twines are not made with a spindle but are rolled on the right thigh with the right hand while the fibers are fed and tension adjusted with the left hand. Long strings finer and stronger than those of cotton may thus be made and like cotton twine they are usually of more than one ply, with about the same repertory as for cotton. With these fibers, however, and especially curagua, the number of individual fibers in the basic strand can be more exactly

[text continues on p. 163]

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Fig. 36 — Kamarakoto Spinning.
The whirling spindle has been dropped. The thread is held by the left hand and unspun cotton fed into it with the right.

283 controlled and the fibers are individually longer, so that an almost microscopic strand of a few fibers or a heavy, up to 3 mm., single-twisted strand can be produced. Thus a stout 3-ply bowstring is made from three heavy initial strands, each about 2 mm. in diameter. The basic twisting in this manner is more often to the right, but both are common, and I believe that Kamarakoto hand-twining must be classified as mixed with right predominating. Frödin and Nordenskiöld have shown that right hand-twining is much more common than left and they classify the Arekunas (probably all Taurepánes in their sample) as right-twining, but with exceptional left-twining and they do show the Guiana coastal Indians as mixed in this respect. In fact, some Indians, including the Kamarakotos, make hand-twine by a technique that can twist it both ways from the middle, and in general the direction of twisting in hand-twisting is not as consistent or as clear a reflection of basic technique as for spinning.

In making some moriche twine, as for sandal fastenings, a curious and rapid technique is employed. The fibers are separated into two bundles and rolled up the thigh, both at once but so that they remain separate, producing two left-twisted strands. The hand then immediately runs down the thigh, twisting these two strands together into a right-twisted two-ply twine.

While on the subject of twine, it should be remembered that strips of bark and vines of all kinds and sizes are often used like twine or rope. Thus tobacco will be tied into a strip of bark for curing, house frames are tied together with vines, etc. Aside from their uses in textiles, however, the spun and twisted twines are commonly used as string to tie loads, baskets, etc.

Textiles Made of Thread.

Textiles made of thread (or twine), which is highly flexible in all directions, naturally require different techniques and serve different purposes from those made of more rigid materials, such as those employed in basketry. The two are, however, related and show a tendency toward association in a single culture complex. This is especially true in cases, like that of the Kamarakotos, in which the basketry is plaited, twined, and woven — techniques also employed in thread textiles — rather than coiled — a technique that cannot be applied to thread textiles.

Cotton and bast threads have much the same properties, but they differ enough that in any one tribe a given type of textile is almost invariably made of one and not the other. Between different tribes there may, however, be replacement of one by the other. Thus the Kamarakotos and most other Caribs make cotton hammocks but many Arawaks, who are in general less proficient in cotton techniques, make bast-thread hammocks.[142] There is also commonly an element of sexual division of labor in these differences. Among the Kamarakotos and various other tribes the spinning of cotton and the manufacture of

142 [see footnote on p. 323, category 116 — Analyst]

283 textiles from it is woman's work while the twisting of bast and the manufacture
286 of textiles from it, although occasionally performed by a woman, is generally
[174] man's work.
[462]

In this tribe, however, bast textiles are uncommon. Bast thread or twine is usually used as such and the only textile usually made of it is netting.

286 The Kamarakotos say that they formerly made large pieces of cloth not
[177] unlike the "zaraza" or trade goods now used for loin cloths and dresses. They are still acquainted with a weaving technique capable of producing true cloth, hardly identical with "zaraza" but similar, and such fabrics are known from related tribes. (E.g., Roth, 1924, Plate 10, Fig. C, shows an Akawai baby sling that includes a large quadrangle of native woven cloth.) At present, however, the supply of trade goods is nearly enough equal to the demand and this true weaving technique is used only to produce long narrow bands.

The Kamarakotos now know and use five thread-textile techniques, each closely associated with different finished articles. To these should be added the several bead-techniques, which also use thread but are so distinct that they are here discussed separately. The five thread techniques are as follows:

1. True weaving, producing long narrow bands for headdresses, carrying straps, etc.
2. Loom twining, producing an open-meshed fabric made in the form of hammocks.
3. Loom plaiting, producing wide circular bands used as baby slings.
4. One-needle crocheting, producing a tight fabric usually in small circular bands, for armlets, anklets, purses (pakara), etc.
5. Knotting, producing netting mainly for fish nets.

[114] True weaving is the one textile technique that I did not see and the de-
[126] scription of it was not entirely clear to me. I have, however, good specimens of the textile thus made. The warp is composed of relatively few strands, usually four for a headband but as many as thirty-two for a carrying strap, which are stretched on a simple frame or between fixed sticks (this is the point that was not clear to me in the description of the process). The weft is then woven in by hand, using a flat stick as a separator and batten. (The Kamarakotos do not use either heddles or shuttles in any of their textile work, although both are known among some rather distantly related tribes in British Guiana.) The whole weft is a single continuous strand, which doubles back around the last warp strand on each side.

Although the weaving technique is basically the same for both, two fabrics of quite different appearance are made in this way (Fig. 37). In one, used for headbands, each warp strand is a thick bundle of separate threads (each of which is, in turn, usually two-ply). A six-fold warp strand is common, but the number is not constant. These heavy warp strands remain straight and the weft strands are simply twined around them. The surface of the finished fabric is

286 As the apron becomes wider below, additional warp strands are added by tying into the most medial of the border bundles -- the borders are never widened and additional warp strands are almost invariably added from the border, only very rarely within the area below the top tie.

When the beaded area is completed, the ends of the warp strands and some other threads added for the purpose are knotted around a transverse string and left projecting as a fringe, which is often dyed pink or reddish brown. Typical completed aprons are shown in Fig. 47.

Bead bands, festoons, and a few special types of stringing beads, although not strictly textiles, have the same character and involve the same sorts of problems. Self-explanatory illustrations of several types of this work are given, Figs. 48-49. Beads are always strung simultaneously on two separate threads even when this is not a technical necessity as it is in the apron fabric. Cotton is generally used, but occasionally very fine curagua thread is employed. All bead work is done by women.

[283] [462]

Basketry.

*285 The Kamarakotos make and use baskets in great numbers and variety and their skill in this respect is perhaps their most interesting characteristic to the visitor. Baskets are necessary to almost every phase of Kamarakoto life. Among the things for which they are used are:

[482] Carrying — a wide variety of baskets adapted for carrying almost everything, light or heavy, that an Indian has to transport.

[251] Storage — open baskets of several sorts for storing food, etc., also chests, jewel boxes, and others.

Mats, as floor mats for closing doors.

Pans.

Plates and trays for serving food.

Casave presses.

Casave sifters.

Trays for drying cotton, etc.

Bird cages.

Fish traps.

Quivers for blowgun darts.

It must, however, also be noted as characteristic that the Kamarakotos and their allies do not use basketry for purposes common among some distant Indians, for instance in North America. They do not make water containers of basketry and so have no boiling baskets, water storage baskets, or basket canteens, cups, and bottles. They do not use basketry as an adjunct to pottery manufacture, nor do they make any clothing, sandals, cradles or baby-carriers of basketry. Finally, they do not make any sort of basketry furniture,

*286 482 sides and at the bottom by a high, continuous rim of basketwork, but not at the top. In the akaí? the weave is the same throughout and consists of any type of lattice, that shown in Fig. 65 B being most common. In the koatai? the bottom is of closed twill, usually with a repeating square spiral pattern, and the sides are latticed. In both the bottom strands are continuous with those of the sides. The sides are never of closework. This basketry is bound all around the edge with split lianas in various ways like those already described for split-cane re-enforced edging on baskets. The back is re-enforced by a rectangular frame of four sticks placed inside but with the ends projecting through the basketwork, lashed with wadapi and also tied to the basketry with curagua twine. Outside the basketry, beneath the longer pieces of this inner frame, two considerably heavier sticks are lashed. A small liana or a split large one is fastened at each bottom lower corner, outside, bent over the rim, and passes down to the same corner inside. A brace of spirally wrapped wadapi runs from the edging at each top outer corner to the top edging of the back piece and another, shorter, from the free part of this to the edging between its two attachments. Finally, a stout cotton cord, to be used to anchor the lacing of the load, is usually permanently looped all around the edging and a more slender, long piece, to use as lacing, is tied to this at some point. Carrying straps, usually of bark, are attached to the heavy sticks outside the base, one to go over the head and two to slip up the arms over the shoulders, although either the head strap or the shoulder straps may be omitted. Among the Taurepánes and apparently most [462] [184] other tribes, these are used by men and women. Among the Kamarakotos they are, like all basketry, made by men but except in very unusual circumstances only the women use them, the man's back-pack being quite different (see "Transportation") and not of basketwork.

*285 411 [128] [237] As regards the dart-quiver, nõi-ye (Fig. 67), I am in the same position as regarding the kapok basket that accompanies it. I cannot be certain that any particular specimen examined was really of Kamarakoto manufacture. The mode of construction is also largely concealed in the finished article, which is all I have seen, by its being heavily covered with beeswax. In this case, however, all are nearly the same in construction and since the Kamarakotos do make some, a general description must apply to their work. The inside of the quiver is a separate basket (sewn to the outer layers) which in the cases I have seen has a square single-hourglass base and all-over twill sides. This is surrounded by at least one and apparently several other layers of heavier basketry, forming a long cylinder flaring at both ends. The upper end is left open, its thick edge neatly braided, and the lower end closed with a circular plate cut from a calabash, tied in place with curagua twine. Except for this [283] base and the upper rim the outside is heavily smeared with beeswax. At about the middle a wide spiral wrapping of moriche cord is tightly applied over the beeswax, and into this is bound a short loop, just long enough to slip over the

[text continues on p. 198]

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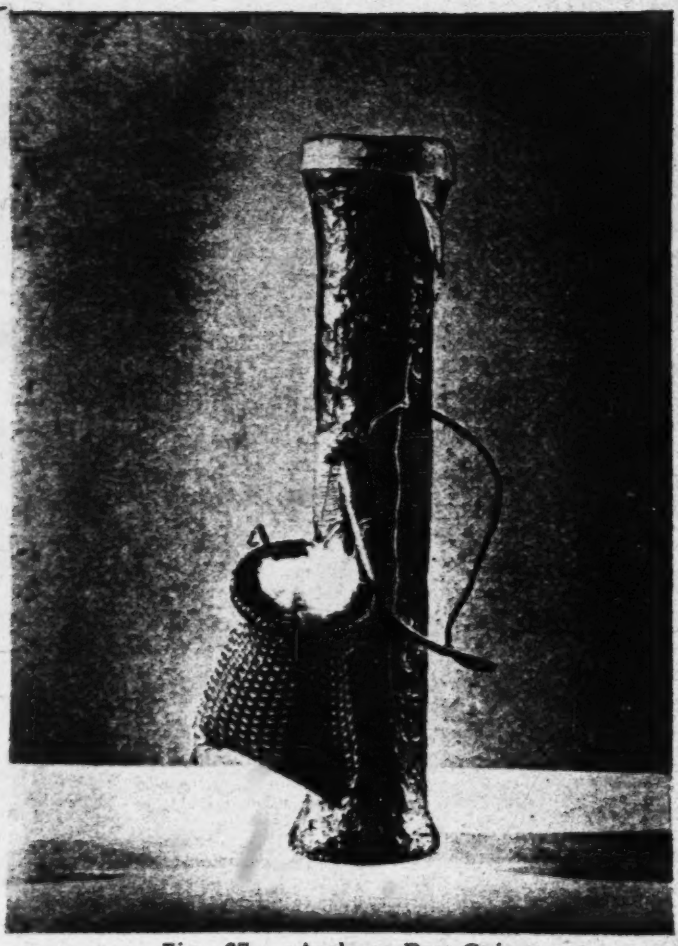

Fig. 67 — Arekuna Dart Quiver.

This specimen was in use by the Taurepanes, but is essentially the same as those used by the Kamarakotos. Attached to the quiver (mŏi-yɛ), proper, is the usual small basket (tsimui³) full of kapok. The only difference from Kamarakoto specimens seen is that in the latter the carrying loop was of moriche cord, not rawhide as here.

shoulder, usually also of moriche cord, braided.[158] The kapok basket is usually tied to this. A cover is made of a circular piece of rawhide, usually deer, by shaping it over the top when wet and allowing it to harden in the proper shape. This is also tied to the carrying strap. One ramus of the jaw of a caribe ("piranha") fish is tied to the rim of the quiver and it is ready for use.

The last usual type of basketry is the muroi' or fish trap.[159] The general form and operation of these has been described under "Fishing." Here it is only necessary to note that it is a framework of withes that are not themselves woven or plaited but are simply tied together by wrapping with basketry strands, the only example of wrapped work seen among these Indians.

The nomenclature of basketry differs more from tribe to tribe than do the baskets themselves. Sometimes the names are descriptive and different tribes vary the descriptions. In other cases cognate special words are used but are applied to different objects by different tribes. A good example is the name pakara which in Arekuna means "purse" and is applied by the Kamarakotos to their thread-textile purses. In British Guiana the same word (from which "pegall" or "pack-all" of the colonists is derived) is applied by the Carib tribes to storage or carrying baskets, commonly to what Kamarakotos call ama:tu, which are entirely different from the Arekuna pakara.

The following synonymy of Kamarakoto and Taurepán names shows how different nomenclature may be even between dialects of the same language.

	Kamarakoto	Taurepán
Mats.		
	o. olori	wõrowori
	(Not observed)	sumbarima (plain plaited casave mat).
Trays and sieves.		
	(Not observed)	arikoponbə (shallow, plain plaited saucer-like mat or tray).
	o:apa	o:əpa
	pangai'	pəŋga'
	matuntu	(Not observed)
Sacks, etc.		
	wakawa'	(Not observed but doubtless known and essentially a large pakaruma.)
	(Not observed)	pakaruma (deep, plain plaited carrying bags made in many sizes and shapes some of which have special names).

158, 159 [see footnotes on p. 326, category 116 – Analyst]

301 135. Although the Kamarakotos may have made shell beads, as some Caribs are known to have done. Probably, however, the Kamarakotos had no [177] suitable materials for these. In any case, seeds were also used and native beads, if they were known, have been completely replaced by the far better and sufficiently abundant foreign beads.

[184] 136. The only exception was a woman who had European earrings but she was married to one of the two men who have lived in Venezuelan towns and her wearing them was obviously not native.

304 137. I am sure that this statement is true in general, but in individual 184 cases it was occasionally impossible to be sure whether a design was painted or 302 tattooed.

000 138. We were interested to observe that some lower-class women in civilized Venezuela, with much Indian blood and definite Indian inheritance in their culture, apply rouge on the face exactly as the wild Indians apply red paint — in large splotches meant to look painted and artificial, and would not think of shading it so as to imitate a naturally bright complexion.

28 139. I do not mean that the textile work of Venezuelan Indians is unknown 114 or has not been mentioned in various excellent studies, but that almost no careful description of its details, nomenclature, etc., have been published. Even Koch-Grünberg's voluminous studies only describe the various textile manufactures in a summary way, with practically no details as to types of weave, etc.

285 140. Speaking of traps woven from this material by the Adole Indians 824 on the Orinoco, Roth says that they are made "from a kind of osier twig, which is ..... called bejuco," but "bejuco," of course, means only "vine" (of any sort, and, incidentally, does not include osiers).

000 141. The Carib word manare has also been taken over into colloquial Venezuelan, with the usual shift in accent, but is applied to the casave sieve, which is made of manare but is not "a" manare in Carib. This is a common etymological phenomenon; compare, in a reverse direction, the adoption of the Spanish word "camisa" not for a shirt but for cotton cloth by some Caribs (not the Kamarakotos).

171 142. In view of this differentiation it is interesting that in civilized ● 283 Venezuela the handmade hammock, "chinchorro," of the common people is 286 made of bast-thread while the spmetimes more aristocratic "hamaca," usually 352 factory-made, is of cotton.

*285 171 by coiling of the best sort, and no true coiling occurs in this area. The skill involved in a fine Carib pictorial twill and its esthetic values appear to me to be as great as in the famous coiled ware of some more northern Indians, but it can hardly be expected to have the peculiar qualities of coiling.

*285 482 14 157. This term has been preferred by various English writers and is correctly descriptive as to function but seems to me to be misleading as to form, since there is nothing sack-like about these carriers.

*285 411 ●283 158. A specimen possibly Arekuna but surely not Kamarakoto has a rawhide thong — an almost unique example of the use of rawhide rather than plant fibers for such purposes.

*285 227 [[7]] [22] 159. Roth calls these "creels" and apparently they are used in British Guiana for carrying fish, however caught. Kamarakotos use them only as traps and carry fish in any carrying (true) basket. If the fish are so lively that they will not stay in an ordinary basket, they are killed — in the case of small fish, by biting their heads.

*285 192 194 160. I did not myself hear this pronunciation from a native, but was told that it is "correct."

*285 531 161. Some Indians are said now to paint similar designs on baskets after they are woven but this (technically degenerate) process is not used by the Kamarakotos.

532 177 162. It is worth recording that in one case several Christian crosses, a non-native element in design, had been scratched on a house, and that in another an exceedingly crude but recognizable figure of a man on a horse was seen, something even more exotic than a cross in Kamarata where no horse has ever set foot. Even these few rough attempts at graphic art have evidently been made under non-Indian influence and by one of the more sophisticated members of the group.

534 824 163. Both Roth and von Hornbostel give evidently cognate words as applying to a transverse bamboo flute, but the Kamarakoto kaikara is certainly a reed flageolet.

534 114 164. I am not certain that a simple sort of reed instrument has not been devised, but I saw none and the evidence is very doubtful. If so, it is doubtless an innovation under foreign influence.